

ALUMINIUM NIOBIUM SILICON TITANIUM 50:25:5:20

GfE Spec.

2000 050

Alloy

AlNbSiTi 50:25:5:20

Application

Approved by the major aircraft engine producers for the production of titanium alloys

Production method

GfE two-step process

1st step: metallothermic reduction

2nd step: vacuum induction melting and casting

Quality

Material 100%

a) visually inspected

b) magnetically separated

Size

0.5 - 0.063 mm with 0% plus 0.5 mm and max. 5% minus 0.063 mm

Packaging

approx. 166 kg in sealed steel drums

Composition

	spec. (wt. %)
Al	46-54
Nb	22-28
Si	3.5-5.5
Ti	18-22
B	max. 0.001
C	max. 0.02
Co	max. 0.005
Cr	max. 0.01
Cu	max. 0.05
Fe	max. L.a.p.
Mn	max. 0.01
Mo	max. 0.01
Ni	max. 0.005
V	max. 0.01
W	max. 0.01
Y	max. 0.001
N	max. 0.02
O	max. 0.1

Physical Data

Tapping temperature	1580 °C
	2876 °F
Solidus/liquidus point	1295/1620 °C
	2363/2948 °F
True density	3.9 g/cm ³
Bulk density	1.85 kg/dm ³